

Geology ADT to BS - Geology

Title	C-ID Designation	C-ID Units	Double	CSUEB Course	Units
Physical Geology with Lab	GEOL 101	4	4		
OR	OR				
Physical Geology AND	GEOL 100 AND				
Physical Geology Laboratory	GEOL 100L				
Historical Geology with Lab	GEOL 111	4			
OR	OR				
Historical Geology AND	GEOL 110 AND				
Historical Geology Laboratory	GEOL 110L				
General Chemistry for Science Majors Sequence A	CHEM 120S	10			
Single Variable Calculus I – Early Transcendentals and Single Variable Calculus II – Early Transcendentals or	MATH 210 and 220	8	4		
Single Variable Calculus I – Late Transcendentals and Single Variable Calculus II – Late Transcendentals or	MATH 211 and 221				
Single Variable Calculus Sequence	MATH 900S				
Additional recommended preparation (not part of the TMC):					
RECOMMENDED WHERE AVAILABLE					
Calculus-Based Physics for Scientists and Engineers: A and Calculus-Based Physics for Scientists and Engineers: B	PHYS 205 and 210	8			
Organismal Biology	BIOL 140	4			
Mineralogy	GEOL 280	4			
TOTAL MAJOR UNITS		26			
CSU GE Requirements		39			
Double Counting GE		8			
Elective		3*			
Total Units		60			

*Can be used to fulfill CSU American Institutions or any additional major requirements

GRADUATION REQUIREMENTS These should be fulfilled at the Community College, however if not taken at the Community College, they must be completed at CSU East Bay			
US History, Constitution & American Ideals			
First Category US-1			0-3
Second Category US-2			0-3
Third Category US-3			0-3
		Total Units	0-9
These courses must be taken at CSU East Bay			
Please note: A minimum of three courses in the Upper Division General Education pattern must have a topic/learning outcome oriented toward one of the following topic areas (overlays): Diversity (DIV) , Social Justice (SJ) , or Sustainability (S) .			
Upper Division GE/Overlay	Courses	Overlay	Units
GE-UD-B			3
GE-UD-C			3
GE-UD-D			3
		Total Units	9
University Writing Requirement	Course	GE/Overlay	Units
UWR			3
		Total Units	3
Lower Division Core	Course	GE/Overlay	Units
GEOL 297	Introductory Field Experience		1
		Total Units	1
Upper Division Core	Course	GE/Overlay	Units
The following 24 units of upper-division core coursework is required:			
GEOL 360	Mineralogy and Optical Crystallography		4
GEOL 361	Igneous and Metamorphic Petrology		4
GEOL 371	Sedimentary Geology and Stratigraphy		4
GEOL 381	Structural Geology		5
GEOL 397 (course will be taken twice for a total of 4 units, but with different subject matter.)	Advanced Field Experience		4
GEOL 499	Capstone Seminar in Geosciences		3
		Total Units	24

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Elective Courses	Course	GE/Overlay	Units
A minimum of 12 units of elective courses are required as outlined below:			
One (1) of the following Quantitative courses is required for 3 units:			
CS 400	Computer Programming for Science		3
CMGT 310	Statics and Strength of Materials		3
MATH 131	Calculus II		3
PHYS 330	Analytic Mechanics		3
STAT 316	Statistics and Probability for Science and Engineering		3
STAT 320	Introduction to Probability Theory I		3
Plus choose a minimum of 9 units of electives from the following * :			
ENSC 350 - Units: 4 ; Breadth Area: Sustainability	Environmental Hydrology	Sustainability	4
GEOL 311	Geomorphology		3
GEOL 398	Internship		1-3
GEOL 431	Applied Geophysics		4
GEOL 432	Hydrogeology		4
GEOL 441	Earthquake Geology		3
GEOL 490	Independent Study		1-3
GEOL 497	Issues in Geosciences		3
*Only one (1) course from the following may apply to the above elective units:			
GEOL 341	General Oceanography		4
GEOL 342	Planetary Geology		3
GEOL 343	Atmospheric Science		3
		Total Units	21
ADDITIONAL COURSE(S) to MEET 60 UNITS		GE/Overlay	Units
These courses may be additional major courses or prerequisites taken at the Community College.			
Free Elective Elective			2
		Total Units	2
		Grand Total:	60

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FIRST SEMESTER (FALL)			
UD-B/Overlay			3
UD Major	GEOL 360	Mineralogy and Optical Crystallography	4
UD Major		Major Elective	3
UD Major		Major Elective	3
UWR			3
		Total:	16
SECOND SEMESTER (SPRING)			
UD Major	GEOL 297	Introductory Field Experience	1
UD Major	GEOL 361	Igneous and Metamorphic Petrology	4
UD Major	GEOL 371	Sedimentary Geology and Stratigraphy	4
UD Major		Major Elective	3
UD-C/Overlay			3
		Total :	15
THIRD SEMESTER (FALL)			
UD Major	GEOL 381	Structural Geology	5
UD Major	GEOL 397	Advanced Field Experience	2
UD Major		Major Elective	3
UD-D/Overlay			3
Free Elective			2
		Total:	15
FOURTH SEMESTER (SPRING)			
UD Major	GEOL 499	Capstone Seminar in Geosciences	3
UD Major	GEOL 397	Advanced Field Experience	2
UD Major		Major Elective	3
UD Major		Major Elective	3
UD Major		Major Elective	3
		Total:	14
		Grand Total:	60